AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A negative planographic printing plate precursor capable of being recorded by infrared laser exposure, comprising a substrate carrying thereon a recording layer wherein: the recording layer contains a polymerizable compound and an infrared absorbing agent, and a polymerization reaction caused by the action of light or heat decreases solubility of the recording layer in an alkali developer wherein; the optical density of said recording layer is in a range from 0.4 to 2.0; and the film hardness of the upper portion of said recording layer after solubility in an alkali developer is reduced due to the action of light or heat is higher than the average film hardness of the whole recording layer.

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2. (Currently Amended) A negative planographic printing plate precursor according to claim 1, wherein said recording layer contains an infrared absorbing agent under conditions where ablation does not occur.

3. (Currently Amended) A negative planographic printing plate precursor according to claim 1, wherein said recording layer contains (A) an infrared absorbing agent, (B) a radical generator and (C) a radical-polymerizable compound which causes a

polymerization reaction with the generated radical, said polymerization reaction causing hardening.

4. (Currently Amended) A negative planographic printing plate precursor according to claim 3, wherein said recording layer further contains (D) a binder polymer.

Q24

5. (Currently Amended) A negative planographic printing plate precursor according to claim 1, wherein the optical density of said recording layer is in a range from 0.6 to 1.6.

6. (Currently Amended) A negative planographic printing plate precursor according to claim 1, wherein the ratio of the film hardness of the upper part of said recording layer to the average film hardness [value of (upper part film hardness/average film hardness)] is 1.2 or more.

7. (Currently Amended) A negative planographic printing plate precursor according to claim 3, wherein said infrared absorbing agent (A) is selected from the group consisting of cyanine colorants, squarylium colorants, pyrylium salts, and nickel thiolate complexes.

8. (Currently Amended) A negative planographic printing plate precursor according to claim 3, wherein said radical generator (B) is an onium salt.

9. (Currently Amended) A method of producing a negative planographic printing plate which comprises a step of exposing, with an infrared laser, a planographic printing plate precursor containing a substrate carrying thereon a recording layer which contains a polymerizable compound and an infrared absorbing agent, and in which a polymerization reaction caused by the action of light or heat decreases solubility of the recording layer in an alkali developer, the optical density of said recording layer is in a range from 0.4 to 2.0, and the film hardness of the upper part of said recording layer after reduction in solubility in an alkali developer due to the action of light or heat is higher than the average film hardness of the recording layer, and a step of developing the plate with a developer, the alkali developer being less capable of permeating through the recording layer after said recording layer is ~~hardend~~ hardened by exposure.

10. (Original) A method of producing a negative planographic printing plate according to claim 9, wherein said recording layer contains an infrared absorbing agent under conditions where ablation does not occur.

11. (Original) A method of producing a negative planographic printing plate according to claim 9, wherein said recording layer contains (A) an infrared absorbing agent, (B) a radical generator and (C) a radical-polymerizable compound which causes a polymerization reaction with the generated radical, said polymerization reaction causing hardening.

12. (Original) A method of producing a negative planographic printing plate according to claim 11, wherein said recording layer further contains (D) a binder polymer.

13. (Original) A method of producing a negative planographic printing plate according to claim 9, wherein the optical density of said recording layer is in a range from 0.6 to 1.6.

14. (Original) A method of producing a negative planographic printing plate according to claim 9, wherein the ratio of the film hardness of the upper part of said recording layer to the average film hardness [value of (upper part film hardness/average film hardness)] is 1.2 or more.

15. (Original) A method of producing a negative planographic printing plate according to claim 11, wherein said infrared absorbing agent (A) is selected from the group consisting of cyanine colorants, squarylium colorants, pyrylium salts, and nickel thiolate complexes.

16. (Original) A method of producing a negative planographic printing plate according to claim 11, wherein said radical generator (B) is an onium salt.

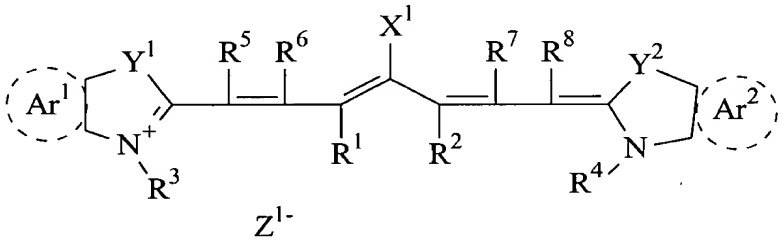
17. (New) A negative planographic printing plate precursor according to claim 1, wherein said infrared laser exposure is conducted at a plate surface energy amount of 80 mJ/cm^2 or more.

Q25

18. (New) A method of producing a negative planographic printing plate precursor according to claim 9, wherein said infrared laser exposure is conducted at a plate surface energy amount of 80 mJ/cm^2 or more.

19. (New) A negative planographic printing plate precursor according to claim 1, wherein said recording layer comprises a sulfonium salt and a cyanine colorant that is represented by general formula (I):

General formula (I)

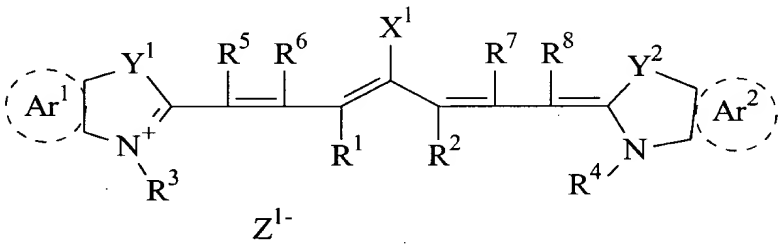


wherein the general formula (I), X1 represents a halogen atom or X^2-L^1 or NL^2N^3; X^2 represents an oxygen atom or sulfur atom; L^1 represents a hydrocarbon group having 1 to 12 carbon atoms; each of L^2 and L^3 independently represents a hydrocarbon group having 1 to 12 carbon atoms; each of R^1 and R^2 independently represents a hydrocarbon group having 1 to 12 carbon atoms; Ar^1 and Ar^2 may be the same or different, and represent an aromatic hydrocarbon group which may have a substituent; Y^1 and Y^2 may be

the same or different, and represent a dialkylmethylene group having 12 or less sulfur atoms or carbon atoms; R^3 and R^4 may be the same or different, and represent a hydrocarbon group having 20 or less carbon atoms and which may have a substituent; R^5, R^6, R^7 and R^8 may be the same or different, and represent a hydrogen atom or a hydrocarbon group having 12 or less carbon atoms; Z^{1-} represents a counter anion, however, when any of R^1 to R^8 is substituted with a sulfo group, Z^{1-} is not necessary.

20. (New) A method of producing a negative planographic printing plate precursor according to claim 9, wherein said recording layer comprises a sulfonium salt and a cyanine colorant that is represented by general formula (I):

General formula (I)



wherein the general formula (I), X1 represents a halogen atom or X^2-L^1 or NL^2N^3; X^2 represents an oxygen atom or sulfur atom; L^1 represents a hydrocarbon group having 1 to 12 carbon atoms; each of L^2 and L^3 independently represents a hydrocarbon group having 1 to 12 carbon atoms; each of R^1 and R^2 independently represents a hydrocarbon group having 1 to 12 carbon atoms; Ar^1 and Ar^2 may be the same or different, and represent an aromatic hydrocarbon group which may have a substituent; Y^1 and Y^2 may be the same or different, and represent a dialkylmethylene group having 12 or less sulfur

atoms or carbon atoms; R^3 and R^4 may be the same or different, and represent a hydrocarbon group having 20 or less carbon atoms and which may have a substituent; R^5, R^6, R^7 and R^8 may be the same or different, and represent a hydrogen atom or a hydrocarbon group having 12 or less carbon atoms; Z^{1-} represents a counter anion, however, when any of R^1 to R^8 is substituted with a sulfo group, Z^{1-} is not necessary.